

CLAIMS

1. Device for compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast message comprising means to detect a common prefix (A.B.C) in at least two destination addresses (A.B.C.D, A.B.C.E) of said list,

CHARACTERISED IN THAT said device for compressing further comprises means to generate a sequence of suffixes ((D,E)) of said at least two destination addresses (A.B.C.D, A.B.C.E), and means to constitute a compound destination address (A.B.C(D,E)), adapted to add said sequence of suffixes ((D,E)) to said common prefix (A.B.C) to thereby constitute said compound destination address (A.B.C(D,E)).

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2. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) consists of Internet Protocol addresses.

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3. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses consists of Internet Protocol addresses and compound addresses similar to said compound destination address.

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4. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses consists of compound addresses similar to said compound destination address.

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5. Device for compressing according to any one of claims 1 to 4,

CHARACTERIZED IN THAT said device is incorporated in a host (H1) of a communications network (INTERNET) having connectionless multicast transmission capabilities.

claim 1
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1A 6. Device for compressing according to ~~any one of claims 1 to 4,~~ ^{claim 1 >}

Subsct 1 of a communications network (INTERNET) having connectionless multicast
5 forwarding capabilities.

7. Method for compressing a list of destination addresses (A.B.C.D, A.B.C.E,
A.F.G.H) of a multicast message whereby a common prefix (A.B.C) is detected in at
least two destination addresses (A.B.C.D, A.B.C.E) of said list,

10 CHARACTERISED IN THAT further a sequence of suffixes ({D,E}) is generated
of said at least two destination addresses (A.B.C.D, A.B.C.E) and a compound
destination address (A.B.C{D,E}) is constituted by adding said sequence of suffixes
({D,E}) to said common prefix (A.B.C).

15 8. Router (R1, R2, R3) of a communications network (INTERNET) having
connectionless multicast forwarding capabilities,

CHARACTERISED IN THAT said router (R1, R2, R3) incorporates a device for
compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast
message as defined by claim 1.

20 9. Router (R1, R2, R3, R4) according to claim 8,
CHARACTERISED IN THAT said router (R1, R2, R3) further incorporates a
routing table memory and means to address said routing table memory via a
compound address similar to said compound destination address.

25 10. Host (H1) of a communications network (INTERNET) having
connectionless multicast transmission capabilities,

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CHARACTERISED IN THAT said host (H1) incorporates a device for compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast message as defined by claim 1.

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